



2600 Bull Street Columbia, SC 29201-1708

> Mr. Gabriel L. Magwood Southern Division NFEC P.O. Box 190010 2155 Eagle Drive North Charleston, South Carolina 29419-9010

Re:

Aboveground Storage Tank Assessment Report dated April 29, 1997

Bldg. 2556 (AST 2556) (Site Identification # 00949) Charleston Naval Complex/Charleston Naval Base

Charleston, SC Charleston County

Date:

October 22, 1997

Dear Mr. Magwood:

The author has completed technical review of the referenced document. As submitted, the report provides a narrative describing closure activities and analytical results of environmental sampling to determine if releases have occurred as a result of operation of the referenced vessel and/or associated piping system. The employed closure activities and sampling results appear to indicate that no additional endeavors for remedial actions and/or contaminant characterization are warranted at the referenced site at this time. If in the future contamination is identified which is attributable to this site, additional assessments and/or remedial endeavors may be required, as appropriate.

Should you have any questions, please contact me at (803) 734-5328.

Sincerely.

Paul L. Bristol, Hydrogeologist Groundwater Quality Section

Bureau of Water

cc:

Trident District EQC





DEPARTMENT OF THE NAVY

SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND P.O. BOX 190010 2155 EAGLE DRIVE NORTH CHARLESTON, S.C. 29419-9010

> Groundwater Assessment and Development Section

5090 Code 1849 29 Apr 1997

Mr. Paul Bristol South Carolina Department of Health and Environmental Control **Ground-Water Protection Division** 2600 Bull Street Columbia, SC 29201

UST ASSESSMENT REPORTS FOR CHARLESTON NAVAL COMPLEX, CHARLESTON, SC

Dear Mr. Bristol:

Enclosed is the Assessment Reports for the closure of storage tanks AST 2524A and AST 2524B, UST H, AST 2556, UST C, UST NH 62, AST NH 62 and UST 38-1 located at the Charleston Naval Complex, Charleston, SC.

If you have any questions please contact me at (803) 820-7307.

N1462-00946 draft 10.21 Atisc 00947 draft 10.21 Final
Atisc 00947 draft 10.21 Final
Atisc 00948 draft 10.21
Bldg 2556 00949 last 10.21
Bldg 2524 00950 draft 10.22

Blda 80 To Donna Owens 10.22

Sincerely,

Petroleum/UST

Aboveground Storage Tank (AST) Assessment Report

RECEIVE

Date Received

"WFA"

State Use Only

Submit Completed Form to:
AST Regulatory Section
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 734-5331

MAY 0 2 1997

Groundwater Assessment and Development Section

I. OWNERSHIP OF AST(S)

Agency/Owner: Southern Division, Naval Facilities Engineering Command, Caretaker Site Office

Mailing Address: P.O. Box 190010

City: N. Charleston State: SC Zip Code: 29419-9010

Area Code: 803 Telephone Number: 743-9985 Contact Person: LCDR Paul Rose

II. SITE IDENTIFICATION AND LOCATION

| Site I.D. #: | Unregulated | 00949 | |
|-----------------|---------------------|---------------------------|------------|
| Facility Name: | Charleston Naval St | ation Annex, Building 255 | 6 |
| Street Address: | Sixth Street | | |
| City: | North Charleston | County: | Charleston |

III. CLOSURE INFORMATION

| Closure Started: 4 Dec 1996 | Closure Completed: 13 Dec 1996 |
|------------------------------|--------------------------------|
| Number of ASTs Closed: 1 N/A | SPORTENVDETCHASN |
| Consultant | UST Removal Contractor |

IV. CERTIFICATION (Read and Sign after completing entire submittal)

| I certify that I have personally examined and am familiar with the information submitted in this and this information, I believe that the submitted information is true, accurate and complete. LCDR Paul Rose | all attached documents; and that based on my inquiry of those individuals responsible for obtaining |
|---|---|
| Name (Type or Print) | |
| Signature | |

V. **AST INFORMATION** Tank 1 Tank 2 Tank 3 Tank 4 Tank 5 Tank 6 Fuel oil A. Product 3,000 gal. B. Capacity..... Unk. C. Age..... Steel D. Construction Material Unk. E. Month/Year of Last Use..... F. Spill Prevention Equipment Y/N..... See note 1 G. Overfill Prevention Equipment Y/N..... R H. Method of Closure Removed/Filled.... N I. Visible Corrosion or Pitting Y/N..... N J. Visible Holes Y/N.....

L. Method of disposal for any ASTs removed.

Note 1: The AST was surrounded by a berm, which acted as

secondary containment.

AST 2556 was removed, drained, cut open at both ends, and cleaned with a steam cleaner. It was then cut up for recycling as scrap metal. (See Attachment III.)

M. Method of disposal for any liquid petroleum, sludges, or waste waters removed from the ASTs.

The residual fuel oil, waste water, and sludge were recycled.

N. If any corrosion, pitting, or holes were observed, describe the location and extent for each AST.

No corrosion, pitting, or holes were found. The tank was painted and in good condition.

VI. PIPING INFORMATION

| | | Tank 1 | Tank 2 | Tank 3 | Tank 4 | Tank 5 | Tank 6 |
|---------|---|------------------|--------|----------|---------|--------|--------|
| A. | Construction Material | Copper | | | | | |
| B. | Distance from AST to Dispenser | 5' See note 2 | | | | | |
| C. | Number of Dispensers | 1 | | | | | |
| D. | Type of System P/S | s | | | | | |
| E. | Was Piping Removed Y/N | Y | | | | | |
| F. | Visible Corrosion or Pitting Y/N | N | | | | | |
| G. | Visible Holes Y/N | N | | | | | |
| H. | Age | Unk. | | | | | |
| Note 2: | AST 2556 provided fuel oil to building 2556's boiler for heating. | | | | <u></u> | | |

I. If any corrosion, pitting, or holes were observed, describe the location and extent for each line.

No corrosion, pitting, or holes were found in the piping.

VII. BRIEF SITE DESCRIPTION AND HISTORY

The AST provided heating oil to building 2556 on the Charleston Naval Station Annex. The facility served as mine training center MU11.

The AST was located in an unpainted concrete block berm, piping was installed underground from the berm into the building.

VIII. SITE CONDITIONS

Yes No Unk

| A . | Were any petroleum-stained or contaminated soils found near the AST? | X | |
|------------|--|---|--|
| B. | Were any petroleum odors detected? If yes, indicate location on site map and describe the odor (strong, mild, etc.) | X | |

IX. SAMPLE INFORMATION

S.C.D.H.E.C. Lab Certification Number

10120

| Sample # | Location | Sample Type (Soil/Water) | Depth* | Date/Time of Collection | Collected By | OVA# |
|-----------------|---------------------------|--------------------------|--------|----------------------------|-----------------|---------|
| SPORT 0303-1 | Beneath berm drain valve. | Soil | 1' 6" | 15 Jan 97 | B. Murray | 1.0 ppm |
| SPORT 0303-2 | Beneath pipe run. | Soil | 1'6" | 15 Jan 97 | B. Murray | 0.7 ppm |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

^{* =} Depth Below the Surrounding Land Surface

X. SAMPLING METHODOLOGY

Provide a detailed description of the methods used to collect <u>and</u> store (preserve) the samples.

After the removal of AST 2556 soil samples were taken. Sampling was performed in accordance with SC DHEC R.61-92 Part 280 and SC DHEC UST Assessment Guidelines.

The samples are identified as follows:

| | Detachment Charleston | Gene | eral Engineering Labs |
|----------------|-----------------------|------|-----------------------|
| Soil Sample | AST-2556-1 | | SPORT -0303-1 |
| Soil Sample | AST-2556-2 | = | SPORT -0303-2 |
| VOA Trip Blank | | | SPORT -0300-5 |

Sample jars were prepared by the testing laboratory. The grab method was utilized to fill the sample containers leaving as little head space as possible and immediately capped. Soil samples were extracted beneath the berm drain valve and beneath the piping at the mechanical connections.

The samples were marked, logged, and immediately placed in sample coolers packed with ice to maintain an approximate temperature of 4° C. Tools were thoroughly cleaned and decontaminated with organic-free soap and water after each sample.

The samples remained in the custody of SPORTENVDETCHASN until they were transferred to General Engineering Laboratories for analysis as documented in the attached Chain-of-Custody Record.

XI. RECEPTORS

Yes No

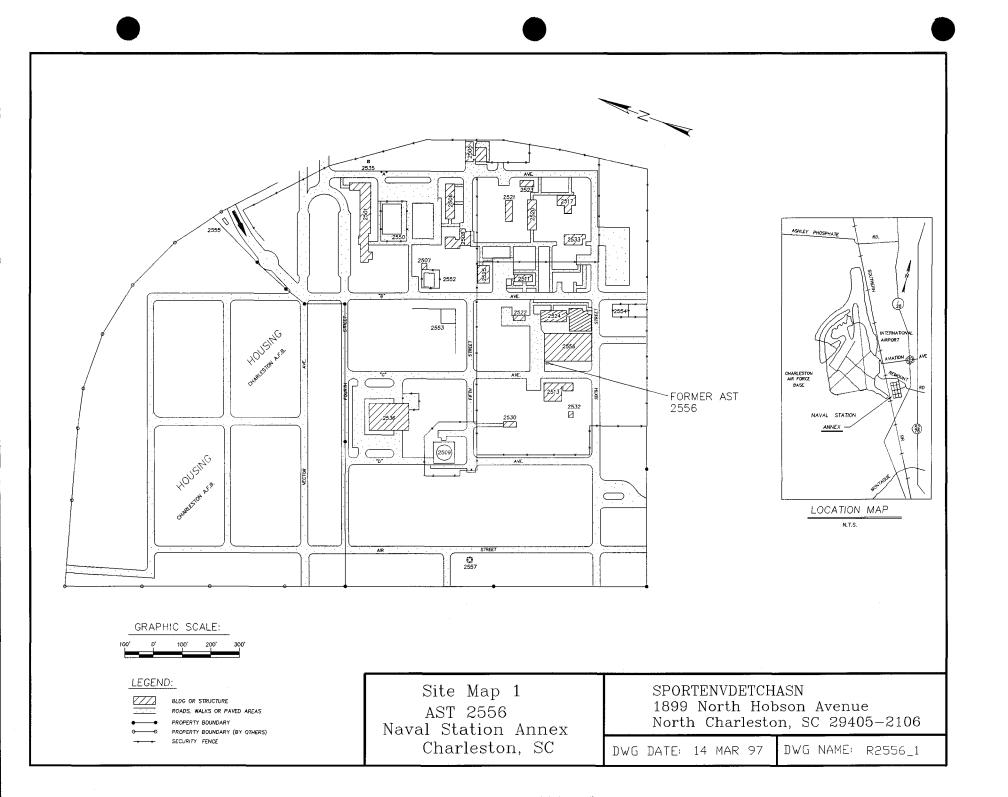
| | A. Are there any lakes, ponds, streams, or wetlands located within 1000 feet of the AST system? | | |
|---|--|---|-------|
| | If yes, indicate type of receptor, distance, and direction on site map. | | X |
| J | B. Are there any public, private, or irrigation water supply wells within 1000 feet of the AST system? | | |
| | If yes, indicate type of well, distance, and direction on site map. | | X |
| (| C. Are there any underground structures (e.g., basements) located within 100 feet of the AST system? | | |
| | If yes, indicate the type of structure, distance, and direction on site map. | | X |
|] | D. Are there any underground utilities (e.g., telephone, electricity, gas, water, sewer, storm drain) located within 100 feet of the AST system that could potentially come in contact with the contamination? If yes, indicate the type of utility, distance, and direction on the site map. | X | |
| | [water, phone, electricity] | | |

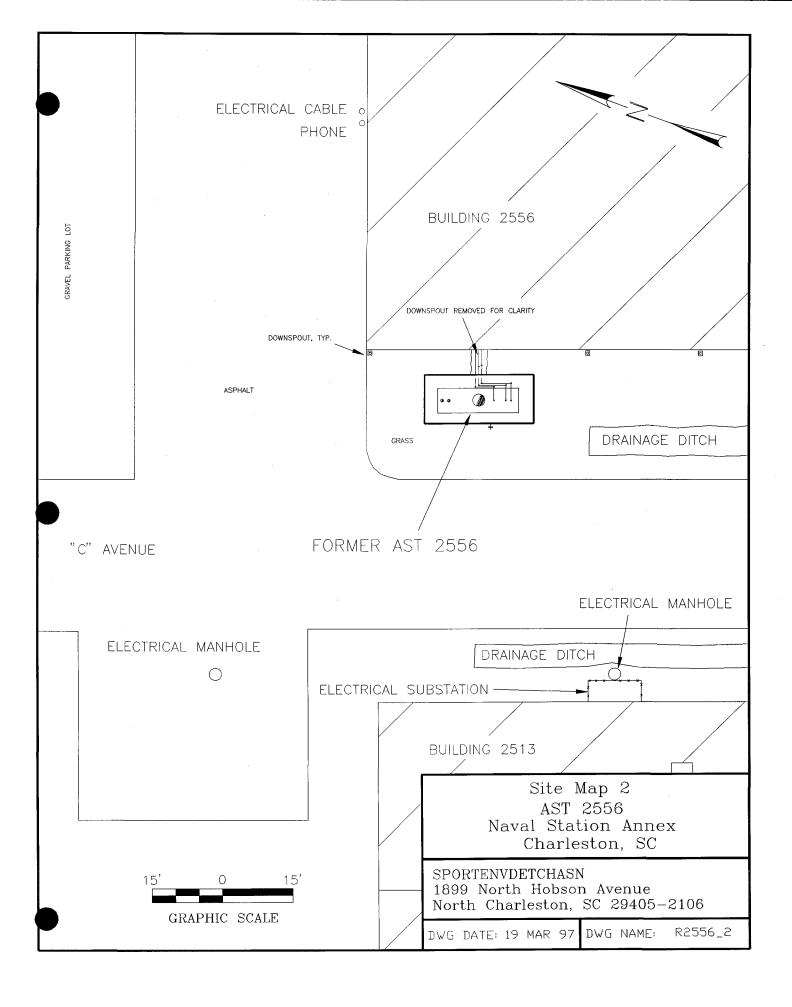
Attachment I

SITE MAP

You must supply a <u>scaled</u> site map. It should include all buildings, road names, utilities, tank and pump island locations, sample locations, extent of excavation, and any other pertinent information.

Site Maps 1, 2 and 3 Photographs 1 and 2





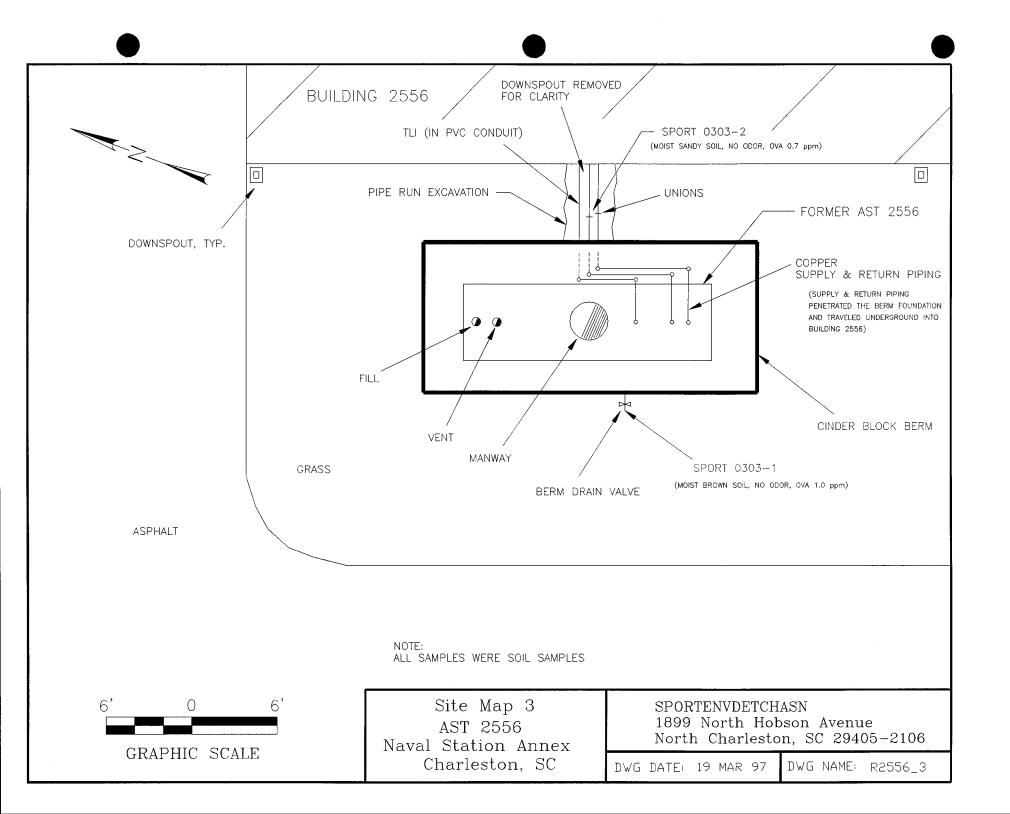




Photo 1: AST 2556 prior to removal.

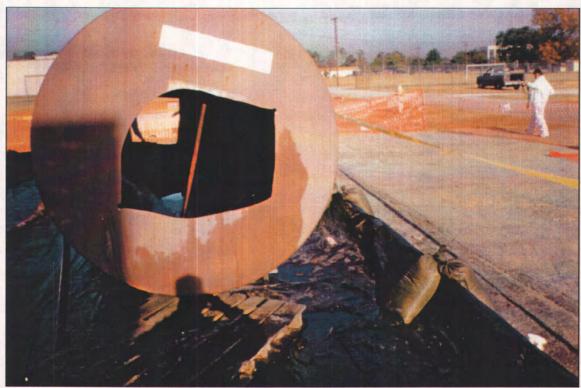


Photo 2: AST 2556 during cutting and cleaning.

Attachment II

ANALYTICAL RESULTS

You must submit the laboratory report and chain-of-custody form for the samples. These samples must be analyzed by a South Carolina certified laboratory.

Certified Analytical Results Chain-of-Custody



Meeting today's needs with a vision for tomorrow.

Laboratory Curtifications STATE GEL EPI E87472/87458 FL NC SC TN E87156/87294 233 10**5**82 02934 10120 02934

Client:

Supervisor of Ship Building & Conversion SUPSHIP-Portsmouth Detachment-Env.

1899 North Hobson Ave.

North Charleston, South Carolina 29405-2106

Contact

Mr. Bill Hiers

Project Description:

SUPSHIP-Portsmouth Detachment

c: NPWC00196

Report Date: January 24, 1997

Page 1 of 2

Sample ID

Lab ID

Matrix

Date Collected

Date Received

Priority

Collector

: SPORT0303-1 : 9701282-01

: Soil

: 01/15/97 : 01/15/97

: Routine

: Client

| Parameter | Qualifier | Result | DL | RL | Units | DF | Azal | yst Date | Time | Dutat | |
|------------------------|----------------|----------|-------------|------|------------------------|-----|------|----------|-------|-------|---|
| Volutile Organics | | | | | - III | | | yat Male | 1 vme | Butch | |
| BTEX - 4 items | | | | | | | | | | | |
| Benzene | U | 0.00 | 1.00 | 2.00 | | 4.5 | | | | | |
| Ethylbenzene | บ | 0.00 | 1.00 | 2.00 | G6 | _ | JAC | 01/22/97 | 1226 | 96708 |] |
| Toluene | ับ | 0.00 | 1.00 | 2.00 | ug/kg | 1.0 | | | | | |
| Xylenes (TOTAL) | Ü | 0.00 | | 2.00 | n g/k g | 1.0 | | | | | |
| Naphthalene | บ | 0.00 | 1.00 | 4.00 | ng/kg | 1.0 | | | | | |
| Extractable Organics | U | 4.00 | 1.00 | 2.00 | n g∖ k ā | 1.0 | | | | | |
| Polynuclear Aromatic h | lydzacarhans . | 16 itame | | | | | | | | | |
| Accusphthene | U | 0.00 | 164 | 222 | | - 4 | | | | | |
| Acenaphthylene | Ü | 0.00 | 164 | 330 | ng/kg | 1.0 | JCB | 01/22/97 | 1744 | 96426 | 2 |
| Anthracene | บ | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Benzo(a)anthracena | U | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Вспио(а)рутеле | บ | | 164 | 330 | ug/kg | 1.0 | | | | | |
| Benzo(b)fluoranthene | | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Benzo(ghi)peryiene | U | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Benzo(k)fluoranthene | U | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| | Ü | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Chrysene | ប | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Dibenzo(a,h)anthracene | บ | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Fluoranthene | U | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Fluorena | U | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| ndeno(1,2,3-c,d)pyrene | บ | 0.00 | 164 | | ug/kg | 1.0 | | | | | |
| Vaphthelenc | U | 0.00 | 164 | | ng/kg | 1.0 | | | | | |
| Phenanthrene | บ | 0.00 | 164 | | ug/kg | 1.0 | | | | | |
| yrene | U | 0.00 | 164 | | ug/kg | 1.0 | | | | | |

The following prep procedures were performed: GC/M\$ Base/Neutral Compounds

01/20/97 1400 96426 3

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9701282-01



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Laboratory Certifications

STATE GEL E8715G/87294 E87472/87458

10582 02934

Client:

Supervisor of Ship Building & Conversion

SUPSHIP-Portsmouth Detachment-Env.

1899 North Hobson Ave.

North Charlesson, South Carolina 29405-2106

Contact:

Mr. Bill Hiers

Project Description:

SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: January 24, 1997

Page 2 of 2

| | Sample ID | : SPORT0303 | -1 | |
|----------------------|-----------|---------------|---------------------------------|---|
| Surrogate Recovery | Test | Percent% | Acceptable Limits | |
| 2-Fluorobiphenyl | M610 | 97.2 | (30.0 - 115.) | |
| Nitrobenzene-d5 | M610 | 82.6 | (23.0 - 120.) | |
| p-Terphenyl-d14 | M610 | 95.0 | (37.3 - 128.) | |
| Bromofluorobenzene | BTEX-8260 | 1 06 . | (53 <i>.</i> 5 - 1 5 4.) | |
| Dibromofhioromcuhane | BTEX-8260 | 102. | (63.4 - 136.) | |
| Toluene-d8 | BTEX-8260 | 111. | (72.1 - 137.) | |
| Bromofluorobenzenc | NAP-8260 | 106. | (53.5 - 154.) | • |
| Dibromofluoromethane | NAP-8260 | 102. | (63.4 - 136.) | |
| Tolueno-d8 | NAP-8260 | 111. | (72.1 - 137.) | |

| M = Method | Method-Description | |
|------------|--------------------|--|
| M 1 | EPA 8260 | |
| M 2 | EPA 8270 | |
| M 3 | EPA 3550 | |

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

I indicates presence of analyze at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

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9701282-01



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^{*} indicates that a quality control analyte recovery is outside of specified acceptance criteria.



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Laboratory Certifications

 STATE
 GEL
 EPI

 FL
 E87156/87294
 E87472/87458

 NC
 233
 10120
 10582

 IN
 02934
 02934

Client:

Supervisor of Ship Building & Conversion SUPSHTP-Portsmouth Detachment-Env.

1899 North Hobson Ave.

North Charleston, South Carolina 29405-2106

Contact:

Mr. Bill Hiers

Project Description:

SUPSHIP-Portsmouth Detachment

∞: NPWC00196

Report Date: January 24, 1997

Page 1 of 2

Sample ID

: **SPO**RT0303-2 : 9701282-02

Metrix

9/01262-02

Date Collected

: Soj)

Date Received

: 01/15/97

Priority

: 01/15/97 : Routine

Collector

: Client

| Parameter | Qualifier | Result | DL | RL | Units | DF | Anal | yst Date | Time | Batch | M |
|-------------------------|-----------------------------|----------|------|------|--------------------|-----|--------------|-----------|------|-------------------|---|
| Volatile Organics | | | | | | | | | | | |
| BTEX - 4 items | | | | | | | | | | | |
| Benzene | U | 0.00 | 1.00 | 2.00 | ug/kg | 1.0 | JAC | 01/22/97 | 1160 | 96708 | |
| Ethylbenzene | U | 0.00 | 1.00 | 2.00 | ug/kg | 1.0 | <i>-</i> 700 | V1/22/31 | 1170 | 30 700 | 1 |
| Toluene | U | 0.00 | 1.00 | 2.00 | ug/kg | 1.0 | | | | * | |
| Xylenes (TOTAL) | Ū | 0.00 | 1.00 | 4.00 | ug/kg | 1.0 | | | | | |
| Naphthalene | U | 0.00 | 1.00 | 2.00 | ug/kg | 1.0 | | | | | |
| Extractable Organics | | | 2.00 | | | 1.0 | | | | | |
| Polymuclear Aromatic h | lydroc ar bons . | 16 items | | | | | | | | | |
| Acenaphthene | U | 0.00 | 164 | 330 | ug/kg | 1.0 | JCB | 01/22/97 | 1818 | 96426 | • |
| Acenaphthylene | υ | 0.00 | 164 | 330 | nā∖rā ~¤~= | 1.0 | ,,,, | 01/22/27/ | 1010 | 70-20 | L |
| Anthracene | U | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Benzo(a)anthracene | บ | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Bcnzo(a)pyrene | U | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Benzo(b) Duoranthene | Ū | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Benzo(ghi)perylene | Ü | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Benzo(k)fluoranthene | ับ | 0.00 | 164 | 330 | ng/rg | 1.0 | | | | | |
| Chrysene | บ | 0.00 | 164 | | ug/kg | 1.0 | | | | | |
| Dibenzo(a,h)anthracene | บ | 0.00 | 164 | 330 | ug/kg | 1.0 | | | | | |
| Fluoranthene | Ü | 0.00 | 164 | | ug/kg | 1.0 | | | | | |
| Pluorene | ប | 0.00 | 164 | | ug/kg | 1.0 | | | | | |
| Indeno(1,2,3-c,d)pyrene | บั | 0.00 | 164 | | ug/kg | 1.0 | | | | | |
| Naphthalene | บ | 0.00 | 164 | | | 7.0 | | | | | |
| Phenanthrene | Ŭ | 0.00 | 164 | | ug/kg | 1.0 | | | | | |
| Pyrene | Ū | 0.00 | 164 | | ng/kg ng/kg | 1.0 | | | | | |
| | | | *** | 220 | ~₽\ ~ ₽ | 4.0 | | | | | |

The following prep procedures were performed: GC/MS Base/Neutral Compounds

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01/20/97 1400 95426 3

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LEF: 802-825-2817 b' 074



Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

GEL. STATE EPI E87472/87458 E87156/87294

02934

10582 02934

Client:

Supervisor of Ship Building & Conversion SUPSHIP-Portsmouth Detachment-Env.

1899 North Hobson Ave.

North Charleston, South Carolina 29405-2106

Contact:

Mr. Bill Hiers

Project Description:

\$UPSHIP-Portsmouth Detechment

cc: NPWC00196

Report Date: Jamiary 24, 1997

Page 2 of 2

| | Sample ID | : SPORT0303 | -2 | |
|----------------------|-----------|--------------|------------------------|--|
| Surrogate Recovery | Test | Percent% | Acceptable Limits | |
| 2-Fhiorobiphenyl | M610 | 95.2 | (30.0 - 115.) | |
| Nitrobenzene-d5 | M610 | 81.8 | (23.0 - 120.) | |
| p-Terphenyl-d14 | M610 | 94.A | (37.3 - 128.) | |
| Bromofluorobenzene | BTEX-8260 | 102. | (53.5 - 154.) | |
| Dibromofluoromethane | BTEX-8260 | 1 03. | (63 .4 - 136.) | |
| Toluene-d8 | BTEX-8260 | 106. | (72.1 - 137.) | |
| Bromofluorobenzene | NAP-8260 | 102. | (53.5 - 154.) | |
| Dibromofluoromethans | NAP-8260 | 103. | (63.4 - 136.) | |
| Toluene-d8 | NAP-8260 | 106. | (72.1 - 137.) | |

| M = Method | Method-Description | |
|------------|--------------------|--|
| M 1 | EPA 8260 | |
| M 2 | EPA 8270 | |
| M 3 | EPA 3550 | |

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the snalyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

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+9701282-02+



^{*} indicates that a quality control analyte recovery is outside of specified acceptance criteria.

NPWC 00196

Page 1 of 1.

CHAIN OF CUSTODY RECORD

| General Engineering Laboratories, Inc |
|---------------------------------------|
| 2040 Savage Road |
| Charleston, South Carc 14 |
| P.O. Box 30712 |
| Charleston, South Carolina 29417 |
| (803) 556-8171 |

| 1 agc 01 | | | | | | | | | | | <u>) [[</u> | | | | | | | | | | | | (803) 330-8171 |
|----------------------------|---------|------------------|-------------|-------------|------------|------------------|---------|----------|--------------------------------|----------|--------------|------------------|-----------|----------|--------------|-------------------|------------------|----------|---------|-----------------|----------|--|--|
| Client Name/Facility N | | | | | | | SAM | IPLE / | ANÁL | YSIS F | RÉQUI | RED | (x) - us | e remar | ks area | to spec | ify spec | ific con | npound | s or me | ethods | П | Use F or P in the hoxes to indicate whether sample was filtered and/or preserved |
| SPORTENV | DETC | HASN | / | | ERS | ╁ | ╫ | - | 105 | -'- | - | <u></u> | | - | | Si | | | | 2 | Ž | | _ |
| Collected by/Company | | | | | CONTAINERS | ivity | | | torid | i a | ify uirec | peci | | | _ | table | table | | | - specify | ħÃ | , | CCL 25163 |
| SPORTEN | DETO | CHASN | ' | | No | duct | 20 | | e.Fi | Nitra | Spec | S | ي ا | <u>و</u> | heno | ktrac | tract | | | Ξ. | 28 | # | |
| SAMPLE ID | DATE | | WELL | COMP | # OF C | pH, conductivity | TOC/DOC | TOX | Chloride, Fluoride, Sulfide | Nitrite/ | VOC - | METALS - specify | Pesticide | Herbici | Total Phenol | Acid Extractables | B/N Extractables | PCB's | Cyanide | Colifor type | NA P | PAH | Remarks |
| SPORTO303-1 | 1/15/97 | | | 1 1 | Z | | | | | | | | | | | | | | | | 1 . | ١. | AST 2556-1 Soil |
| SPORTO303-1 SPORTO303-Z | 1/15/97 | 1115 | X | X | 2 | | | | | | | | | | | | | | | | X | X | AST2556-Z Soil |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | NOTE: SEE |
| | | | | | | | | | | | | | | | | | | | | | | | SPORT \$3\$\$-5 |
| | | | | | | | | | | | | | | | | | | | | | | | FOR Soil TRIP |
| | | | | | | | | † | | | | | | | | | | | | | | | BlANK. |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | <u> </u> | | | | | | | | | | | | | | | | - | | |
| | | | \parallel | + | - | - | | | | | | | - | | | | | | | - | | | |
| | | | H | \parallel | ļ | <u> </u> | | | | | | | | | | | | | | | - | | |
| | | | | | | | | | <u></u> | | | | | | | | | | | <u> </u> | | | |
| Relinquished by: | / | Date: 1/15/97 | Time 140 | 45 | Rece | ived I | 1.1 | 2.1 | Lu | er. | 20 | <u>h</u> . | Relin | quish | ed by: | K. | H | ier | 4 | h. | Date 1// | 5/7/ | Time: Received by: 1534 (Lyslaud Hendleson |
| Relinquished by: | // | Date: | Time | e: | Race | ived b | y lab | by: | Ū, | | 10 | ′' | Date | I_{-} | Time | 2: | Rem | arks: | 1 | 7 | • | | - |
| Landy and | Juleal | 11/15/07 | 15 | '< | 1/), | Ω4. | ٠, ٨ | JJ | 180 | 41 | 'עע' | | la 115 | 19 | 015 | 51 | 1 | | | | | | J |

White = sample collector

Yellow = file

Pink = with report



Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

| STATE | GEL | EPI |
|-------|--------------|-----------|
| FL. | E87156/87294 | E87472/87 |
| NC | 233 | |
| SC | 10120 | 10582 |
| TN | 02934 | 02934 |

Client:

Supervisor of Ship Building & Conversion

SUPSHIP-Portsmouth Detachment-Env.

1899 North Hobson Ave.

North Charleston, South Carolina 29405-2106

Contact:

Mr. Bill Hiers

Project Description:

SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: January 24, 1997

Page 1 of 2

Sample ID

: SPORT0300-5

Lab ID

: 9701281-05

Matrix

: Soil

Date Collected

Date Received

: 01/15/97

: 01/15/97

Priority

: Routine

Collector

: Client

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analy | yst Date | Time | Batch | M |
|-------------------|-----------|--------|------|------|-------|---------|-------|----------|------|-------|---|
| Volatile Organics | | | | | | <u></u> | | · | | | _ |
| BTEX - 4 items | | | | | | | | | | | |
| Benzene | U | 0.00 | 1.00 | 2.00 | ug/kg | 1.0 | TAC | 01/22/97 | 1128 | 96708 | 1 |
| Ethylbenzene | U | 0.00 | 1.00 | | ug/kg | 1.0 | 3110 | 01/22/57 | 1120 | 20700 | • |
| Toluene | U | 0.00 | 1.00 | 2.00 | ug/kg | 1.0 | | | | | |
| Xylenes (TOTAL) | U | 0.00 | 1.00 | 4.00 | ug/kg | 1.0 | | | | | |
| Naphthalene | U | 0.00 | 1.00 | 2.00 | ug/kg | 1.0 | | | | | |

| Surrogate Recovery | Test | Percent% | Acceptable Limits | |
|----------------------|-----------|----------|-------------------|--|
| Bromofluorobenzene | BTEX-8260 | 96.0 | (53.5 - 154.) | |
| Dibromofluoromethane | BTEX-8260 | 98.0 | (63.4 - 136.) | |
| Toluene-d8 | BTEX-8260 | 103. | (72.1 - 137.) | |
| Bromofluorobenzene | NAP-8260 | 96.0 | (53.5 - 154.) | |
| Dibromofluoromethane | NAP-8260 | 98.0 | (63.4 - 136.) | |
| Toluene-d8 | NAP-8260 | 103. | (72.1 - 137.) | |

M = Method

Method-Description

M 1

EPA 8260



9701281-05



Meeting today's needs with a vision for tomorrow.

Laboratory Certifications

STATE GEL E87156/87294 E87472/8745 FL NC SC TN 233

10120 10582 02934 02934

Client:

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Mr. Bill Hiers

Project Description:

SUPSHIP-Portsmouth Detachment

cc: NPWC00196

Report Date: January 24, 1997

Page 2 of 2

Sample ID

: SPORT0300-5

M = Method

Method-Description

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories standard operating procedures. Please direct any questions to your Project Manager, Karen Blakeney at (803) 769-7386.

un Blokener

MD1000196

| Page | 1 | of | - [| • |
|------|---|----|-----|---|

CHAIN OF CUSTODY RECORD

General Engineering Laboratories, Inc. 2040 Savage Road
Charleston, South Car. P.O. Box 30712
Charleston, South Carolina 29417
(803) 556-8171

| 1 450_1 | 011_ | | | | | | | | 9 | | TX | 8 | | | | | | | | | | | | (803) 556-8171 |
|-------------|---------------------|---------|----------|---------|---------------------|------------------------|------------------|---------------|--|--------------------------------|-----------------|----------------------------------|------------------|-----------|-----------|--------------|------------------|------------------|---------|---------|--|---------|----------|--|
| | me/Facility Na | | | | | | F | SAM | IPLE A | NAL' | YSIS R | EQUI | RED (| x) - use | remarl | ks area t | o speci | fy speci | fic com | pound | s or me | thods | | Use F or P in the boxes to indicate whether sample was filtered and/or preserved |
| SPO | RTENV by/Company | DETC | HASN | | | KERS | <u> </u> | 1 | | 활 | | | Ę, | | | | 8 | 8 | | L | <u>ا</u> خ | - 0 | | |
| Collected | by/Company | アニナット | BAURE | my . | | CONTAINERS | ctivit | | | luori | rate | cify | sbec | | | ᅙ | ctabl | table | İ | | sbeci | 3.6 | 7 | CCL 25164 |
| 1260 | RTENV | DEIC | 1 | 1 | 7.7 | _ § | ondu | 100 | | ide. F | Sit | Spe od re | VIS. | ide | cide | Phen | Extra | xtrac | | ä | Ė | χĒ | 4 | |
| SAM | APLE ID | DATE | TIME | WELL | COMP | #OF | pH. conductivity | TOC/DOC | ТОХ | Chloride, Fluoride, Sulfide | Nitrite/Nitrate | VOC - Specify Method required | METALS - specify | Pesticide | Herbicide | Total Phenol | Acid Extractable | B/N Extractables | PCB's | Cyanide | a Collina | EZ E | PAH | Remarks |
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| Bu | un I / Cu | 7/_ | 1/15/97 | 1/2 | 140 | 2 | <u> </u> | by: by lab | <u>K</u> | 119 | QL | 0,1 | h. | | 4 | <u> </u> | (.] | re | s, | M | | 1/15 | 187 | 1536 Cyster Plandicse |
| Relinquishe | ed by: | | Date: | 1 | me: | Rec | gived I | by lab | J. J. | 1/a | Λ. <i>μ</i> | ں ر مامہ | n | Date: | 16 | Time 7 15 | 57 | Rema | ırks: ' | 0 | | | | |
| Lupa | = sample coll | evillon | <u> </u> | | | / <u>//</u> Pink : | | | | TC | un | 118 | | 444 | 74 | | | | | | | | | |

Attachment III

Certificate of Disposal (tank)

AST Certificate of Disposal

CONTRACTOR

Supervisor of Shipbuilding, Conversion and Repair, USN Portsmouth, VA Environmental Detachment Charleston 1899 North Hobson Avenue North Charleston 29405-2106

Telephone (803) 743-6482

TANK ID & LOCATION

2556; Building 2556, Sixth St., Naval Station Annex, N. Charleston, SC

DISPOSAL LOCATION

Bldg. 1601 Tank Cleaning & Disposal Area Charleston Naval Complex

| TY | PE | OF | TA | NK |
|----|----|----|----|----|
| | | | | |

SIZE (GAL)

Fuel oil

3,000 gal.

CLEANING/DISPOSAL METHOD

The tank was cut open on both ends, cleaned with a steam cleaner, cut into sections, and disposed of as recyclable scrap metal.

DISPOSAL CERTIFICATION

I certify that the above tank has been properly cleaned and disposed of as recyclable scrap metal.

Sidney C. Ladson

(Date)